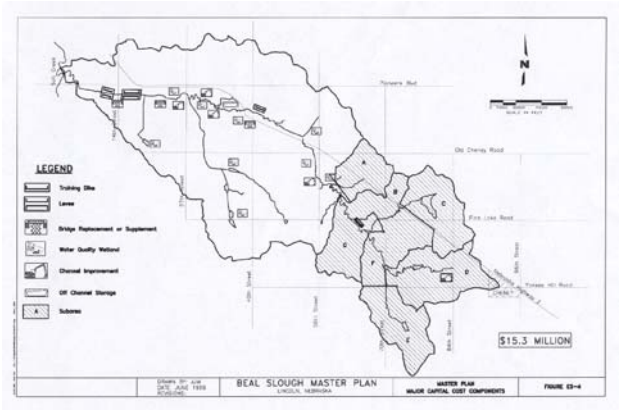
## Floodplain Management: Watershed Master Plan Standards




### Description

The City and Lower Platte South NRD have commenced a process of master planning for each basin or watershed within the City of Lincoln and its future growth areas. The first master plan was completed for the Beal Slough basin in 2000, and the next area in process is the Southeast Upper Salt Creek Watershed. Eventually, all the master planned basins will be tied together in a comprehensive watershed master plan for the City of Lincoln and its environs.

The basin master plans provide a database of watershed information and a hydrologic/hydraulic computer modeling system which are used as analysis tools. The plans also include capital cost elements for floodplain management, water quality, and stream stability. The project components and computer model output are utilized by the City and NRD in evaluating and guiding future changes proposed within the basin.

Today, basin master plans are adopted by reference into the City-County Comprehensive Plan. Master plan components include:

- Better flood information: Existing and future 100-year floodplain and flood elevations along streams up to the uppermost 150 acre sub-basins. Depending on the basin, this may include areas previously mapped by FEMA, and/or previously unmapped tributaries.
- Structural project components - such as bridge/culvert improvements, stormwater retention basins, and constructed wetlands
- Non-structural project components - such as preservation of the 100-year floodplain.

### Advantages

★ Floodplain standards are based upon the best available information and a comprehensive watershed approach to stormwater management

★ Provides an increased level of flood protection

★ Takes into account important natural functions of the floodplain beyond flood storage and conveyance, such as water quality and stream stability considerations.

★ There is an opportunity to consider regulating based upon future conditions for a higher level of proactive floodplain management.

★ Increased opportunities for multiple-use greenway corridors providing flood control and water quality benefits.

| **Floodplain Management:** | | **Watershed Master Plan Standards** |
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| **Disadvantages** | ☹ | Challenges in implementing proposed capital project components due to timing of development relative to funding |
| | ☹ | Administrative challenges in regulating master plan floodplain in addition to FEMA-mapped floodplain areas (until FEMA maps are revised to reflect new floodplain information). |
| | ☹ | Consideration for impacts to private property if regulations were based upon a future conditions floodplain. |
| **Implementation Considerations** | ● | Better coordination between watershed model and information submitted with development proposals so that information is consistently provided on a sub-basin level that is compatible with the City/NRD model |
| | ● | Strengthen tie to master plan through zoning and subdivision ordinances to require impacts of individual developments to be compatible with the master plan |
| | ● | Regulate 100-year floodplain as identified in completed master plan until FEMA maps are revised to reflect the revised floodplain boundary |
| | ● | Regulate based upon future conditions as identified in master plan |
| **References** | • | Watershed master planning discussion 4/16/04 (no handouts available) |
| | • | Watershed master planning handout 9/24/02 |